Veronica Cateté

2824 Henslowe Dr • Raleigh, NC 27603
Phone: (919) 820-2578 • E-Mail: vmcatete@ncsu.edu
www4.ncsu.edu/~vmcatete

Education

Ph.D. Computer Science, NC State University Exp: May 2016

> **Research**: My research interests are in *game based learning* and *curriculum development & evaluation.*
> GPA 3.7

MS. Computer Science, UNC Charlotte Concentration: *Intelligent & Interactive Systems*, 2012

> **Research**: Social game based learning for introductory programming & Social networking games to improve interaction at conferences. (bots.game2learn.com, snagemgame.com)
> GPA 3.64

B.S. Computer Science, NC State University *Magna Cum Laude* Minor: *Science Technology & Society,* 2010

> **Research**: Measuring affect in intelligent game based learning environments. Won student research symposium at STARS Conference 2010
> GPA 3.56

Project Highlights

Collaborated with NCSU's History department to design a series of iPad and Kinect games on Lebanese Migration to North Carolina for NC Museum of History

Design & developed a forensics game for Shaw University to promote STEM interest in freshman intro class

Worked with UC Berkley and NCVPS to redesign and develop a CS Principles pilot course for secondary Ed.

Worked with STARS on High Hopes Haiti to mentor young women in computing, taught Scratch and OLPC use, and set up donated computers

Lead programmer on team of 4, to develop a web based Scavenger Hunt Detective game, for Discovery Place, a children's museum in Charlotte, NC

Specialty Courses

Intelligent Game Based Learning Environments, Evaluation of Game Design Techniques, Mobile App Dev
Research Design & Quant Methods, Adv. Educational Psychology, Educational Data Mining
Software Engineering, Data Structures & Algorithms, Artificial Intelligence II, Graph Theory

Technologies & Languages

Java, JavaScript, C#, C++, ActionScript, C|HTML, CSS, PHP, SQL|Unity3D, XNA, Eclipse, Visual Studio

Research Grants & Awards

• National Science Foundation Graduate Research Fellowship, *$132,000*	2012-2016
• Microsoft Research Graduate Women's Scholarship, *$17,000*	2012
• Grace Hopper Conference – Apple Scholarship, *$800*	2012
• NCSU Women in Computer Science – GHC Scholarship, *$2,400*	2010, 2013
• STARS Alliance Travel Grants ~*$4,600*	2009-2013

Research Experience

- **Microsoft Research**, Redmond, WA — Summer 2014
  Research Assistant, Rane Stempson-Johnson, Dr. Kelvin Sung

- **NCSU Center for Educational Informatics**, Raleigh, NC — 2012 - Present
  Research Assistant, Dr. Tiffany Barnes, Dr. James Lester

- **UNCC Games + Learning Lab**, Charlotte, NC — 2010 - 2012
  NSF Research Experience for Undergrads, Dr. Tiffany Barnes

- **NCSU IntelliMedia Group**, Raleigh, NC — 2009 - 2010
  2 NSF Research Experience for Undergrads, Dr. James Lester

- **NCSU Software Engineering & Requirements Lab**, Raleigh, NC — 2010
  NSF Research Experience for Undergrads, Dr. Laurie Williams

Peer-Reviewed Conference Publications

Price, T., Albert, J., **Catete, V.**, and Barnes, T. (2015). BJC in Action: Comparison of Student Perceptions of a Computer Science Principles Course. To be in *Proceedings of the first annual conference on Research in Equity and Sustained Participation in Engineering, Computing, and Technology* (RESPECT)

Price, T., **Catete, V.**, Albert, J., and Barnes, T. (2015). Determining the Impact of Teacher Professional Development on Perceived Ability to Teach a Computer Science Principles Course. To be in *Proceedings of the eleventh annual conference on International computing education research* (ICER '15). (in review)

Hicks, A., **Catete, V.**, Zhi, R., Dong, Y., and Barnes, T. (2015) BOTS: Selecting Next-Steps from Player Traces in a Puzzle Game. In *Proceedings of the 7th International Conference on Educational Data Mining, Workshop on Graph-based Educational Data Mining* (G-EDM 2015).

Hicks, A., **Catete, V.**, Zhi, R., Dong, Y., and Barnes, T. (2015) Applying "Deep Gamification" Principles to Improve Quality of User-Designed Levels. To be *in Proceedings of the eleventh annual conference on Games+Learning+Society* (GLS 11). (in review)

Cateté, V. 2014. CS outreach to high school enrollment: bridging the gap. In *Proceedings of the tenth annual conference on International computing education research* (ICER '14).

Hicks, A., **Catete, V.**, and Barnes, T. (2014). Part of the Game: Changing Level Creation To Identify and Filter Low-Quality User-Generated Levels. In *Proceedings of the International Conference on the Foundations of Digital Games* (FDG 2014). (Best Paper Nominee)

Cateté, V., Wassell, K., and Barnes, T. (2014). Use and Development of Entertainment Technologies in After School STEM Program. In *Proceedings of the 45th ACM technical symposium on Computer science education* (SIGCSE 2014).

Powell, E., Brinkman, R., **Catete, V.**, and Barnes, T. (2012). Table Tilt: Making Friends Fast. In *Proceedings of the International Conference on the Foundations of Digital Games* (FDG 2012).

Extended Abstracts & Posters

Olaya, J., D. Hicks, **V. Catete**. (2012). "Teaching Concepts through Educational Games Using Social Aspects Within Peers." In *Proceedings of the 43rd ACM technical symposium on Computer science education* (*SIGCSE* 2012).

Sabourin, J. **V Catete**, M Draelos, et al. (2011) "SPARCS Middle School Outreach." Poster at STARS Celebration 2011*, 1st place Outreach Poster*

Draelos, M., **V. Catete**, O. Estrella et al. (2011). "Digital Logic Lesson Plan for Middle School Outreach." Poster at STARS Celebration 2011, *2st place Outreach Poster*

Catete, V., J. Sabourin. (2010). "Examining Facial Expressions of Emotion in Narrative Centered

Learning Environments." Poster at STARS Celebration 2010, *1st place Research Poster*

Catete, V., J. Sabourin. (2010) "Designing & Building a Pressure Sensitive Seat for analysis of Student Affect in Game." Poster at NCSU Poster & Pies SRC

Presentations & Workshops

Barnes, T., **V. Catete**, A. Hicks, B. Peddycord III. "Making Games and Apps in Introductory Computer Science." Workshop at SIGCSE 2014.

Barnes, T., A. Boyce, **V. Catete**. "Augmenting Introductory Computer Science Classes with GameMaker and Mobile Apps". Workshop at SIGCSE 2013.

Lodah, S. Y. Chun, **V. Catete**. "TouchDevelop in Teaching". Panel at TouchDevelop Workshop 2013.

Catete, V., K. Doran. "3rd World Network Administration". Presentation at STARS Celebration 2012.

Catete, V., A. Watson. **"**Initiating and Implementing a Successful Outreach Program". Workshop at STARS Celebration 2012.

Doran, K., **V. Catete**. "Evaluating Your Outreach". Breakout session at STARS Celebration 2012.

Catete, V. J Situka. "BOTS: Graphical Programming for Beginners". Presentation at Charlotte REU SRC 2010, *Honorable Mention.*

Community Engagement & Service

• NCSU Graduate Student Association, Vice President	2012-Present
• WICS Women in Computer Science, Member, Consultant	2012-Present
• UNCC Student Government, Senator, Dept. Secretary, VP elect	2011 – 2012
• Students & Technology in Academia, Research, & Service (STARS Corps), Member, Team Lead (2011-), President (2012-)	2009 – Present
• SPARCS Middle School Outreach, Regional Coordinator	2011 – Present
• Association of Computing Machinery, Member	2010 – Present
• Upsilon Pi Epsilon, International Honor Society for Computing & Informatics Disciplines, Member	2010 – Present
• American Legions Jr. Auxiliary, Member	2006 – Present
• Relay4Life (Childhood Cancer Awareness)	2003 – Present

Game Competitions

• International Women's Hackathon – Co-hosting event for NCSU's newly accepted female computer science students	2014, 2015
• Global Game Jam – Orchestrated a 1st time location, collaborated with IGDA chapter to facilitate interaction between industry and students	2013
• Global Game Jam – *Bear Fight: Teddy Edition*. Lead Programmer, team of six. Multiplayer fighter game for girls, teddy bears having a pillow fight.	2012
• Global Game Jam – *Baby Mammoths Journey to Mars*, now available on XBLIG. Level Designer, team of four. Canabalt game. (xbox 360)	2011
• Imagine Cup – *Heroine*, Honorable Mention. Lead programmer, team of 4. Made a 2D fighter, featuring iconic historical women like Joan of Arc.	2011

Professional Service

- Bulletin of the American Meteorological Society - Reviewer — Spring 2014
- Proceedings of the Foundations of Digital Games - Reviewer — 2014, 2015
- Journal for Education Data Mining - SubReviewer — 2014
- International Conference on AI in Education - SubReviewer — 2013
- OOPSLA/SPLASH – Programming for Mobile and Touch – Program Committee, Reviewer — 2013 – Present

Teaching Experience

- Teaching Assistant, NCSU, CSC 226 - Discrete Mathematics
  Responsibilities include grading and proctoring exams — 2012
- Teaching Assistant, UNCC, ITCS 5231 - Adv. Game Design & Dev.
  Responsibilities include grading, and giving 2 lectures — 2012
- Teaching Assistant, UNCC, ITCS 5236 - Serious Games
  Responsibilities include grading, 1 lecture, and mentoring team projects — 2011
- Invited Speaker, Weatherstone Elementary, Used robots to teach a class of 1st graders about balance and motion. — 2013
- Char-Meck Parks and Recreation Center, Teen Tech Week – Led a summer camp, with 21 students, 3 hours a day, teaching apps & robotics — 2012
- UNC-Charlotte, Primary Academy – Led five 2.5 hour workshops for 18 4th graders, teaching them how to create stories/games in Scratch — 2012
- Microsoft® DigiGirlz Camp – Led 1 hr. workshops teaching high school girls how to build video games using Game Maker software. — 2010 - 2012

- **Students in Programming, Robotics, And Computer Science** (SPARCS) – SPARCS is a middle school outreach program aimed at broadening participation in computing. College mentors majoring in computer science run hands-on workshops introducing participants to computing concepts and applications. Sample workshops include, LEGO Mindstorm robotics, and Alice Programming. — 2009 - Present
  - o (2009) Joined the program in its second year as a mentor, created GameMaker workshop. (go.ncsu.edu/stars_sparcs)
  - o (2011) Led a team of 13 undergraduates to duplicate the program at 3 new locations (McClintock Middle School (McClintock Family Night), MLK Jr. Middle School (Citizen Schools), and UNC Charlotte (NC Math and Science Education Network - Saturday Academy). (starscomputingcorps.org/sparcs)
  - o (2012) Created and led iPhone (XCode), Android (AppInventor), Windows Phone (TouchDevelop), and HTML5 web development workshops.
  - o (Present) Regional Coordinator of 6 SPARCS programs, which meet ~6 hours a month. There are ~130 students currently enrolled in the program.